

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :
Joachim BUENGER : Group Art Unit.: 1614
Serial No.: 10/509,368 : Examiner: HUGHES, Alicia
Filed: September 28, 2007 :
Title: USE OF COMPATIBLE SOLUTES FOR INHIBITING THE RELEASE OF CERAMIDES

REPLY

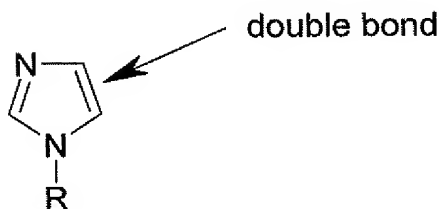
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SIR:

In response to the Office Action mailed on October 19, 2009, please consider the remarks.

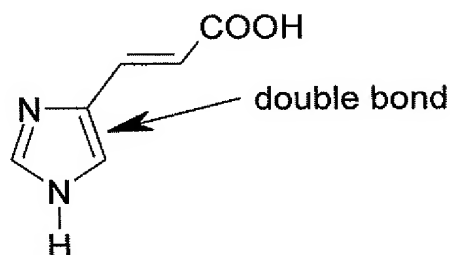
Applicants continue to disagree with the prior art rejections for reasons of record and additionally for the following detailed reasons.

Cauwenbergh discloses a method for topically treating subjects affected by photo-ageing of the skin by administering the compound ketoconazole (column 1, lines 40-44; column 2, lines 50-55). Ketoconazole stands for the compound cis-1-acetyl-4-[4-[[2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl] piperazine. This complex compound exhibits an imidazole radical:

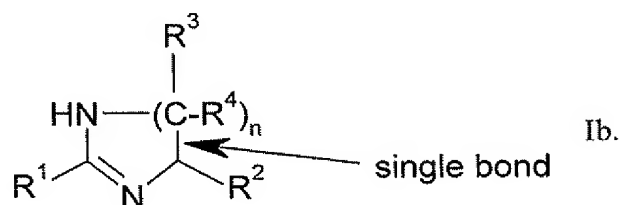
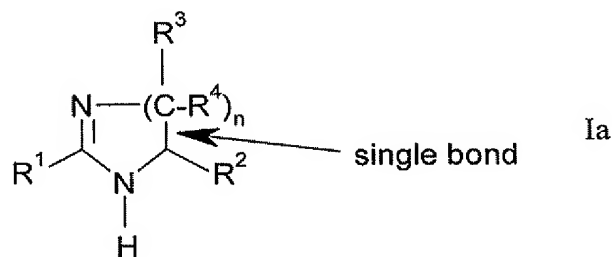


Mohammad discloses that (E)-urocanic acid (2-propenoic acid, 3-[1H-imidazol-4(5)-yl]) has light absorbing properties and undergoes isomerization to the (Z) isomer upon excitation with UVA light (page 8897, paragraph 1). This excited molecule may be involved

in processes with regard to photoageing of the skin (page 8900, paragraph 2). Urocanic acid is an imidazole derivative given by the following structure:



The compounds according to the present invention are given by the following formulae:



These compounds do not represent imidazole derivatives. As illustrated above, the heterocyclic ring of the claimed compounds only exhibits one double bond instead of two. Therefore, the combination of the overlapping structural features of the molecules disclosed by Cauwenbergh and Mohammad would not have led to the molecules of the instant invention.

Furthermore, the effectiveness of active compounds may strongly vary with respect to small changes in their structure.

The effectiveness of the very complex structure disclosed by Cauwenbergh would have been expected by one of ordinary skill in the art to change significantly if it was reduced to a simple imidazole ring.

The compound disclosed by Mohammad is simpler. However, Mohammad discloses that the Z isomer of urocanic acid is of photobiological interest, whereas the E isomer is not. Therefore, the substituent (2-propenoic acid) of the imidazole radical would have been expected by one of ordinary skill in the art to play the major role in this process.

A person of ordinary skill in the art would, therefore, not have considered combining the overlapping structural features in order to obtain a simple imidazole derivative and further reducing the imidazole ring to a heterocyclic ring exhibiting only one double bond.

As such, there is no obviousness.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

/Csaba Henter/

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